

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 8, line 27 with the following:

The cells isolated from fat tissues are added to the bone marrow cells or cord blood-derived cells, and the resultant is subjected to two-dimensional culture using a commercially available culture dish. Alternatively, coculture is carried out under conditions where the fluid factor of the cells isolated from fat tissues can intercommunicate with the fluid factor of the bone marrow cells or cord blood-derived cells. The ratio of the bone marrow cells or cord blood-derived cells to be mixed with the cells isolated from fat tissues (the cell count ratio) is preferably ~~0.1:1 to 1:10~~ 1:1 to 10. The ratio of bone marrow cells to be mixed with the cells isolated from fat tissues is particularly preferably approximately 1:4.

Please replace the paragraph at page 16, lines 12-17 with the following:

The results are shown in Fig. 6. The bone marrow cells that had been cultured together with ~~myocardial~~ fat tissue-derived cells generated about 20 to 60 colonies that were deduced to be myocardial cells 1 or 2 weeks after the initiation of culture. Such myocardial cell colonies included cells derived from bone marrow that had been labeled with fluorescent PKH67 (Fig. 6A). In contrast, differentiation into myocardial cells was not observed in the bone marrow cells that had been cultured alone (Fig. 6B).